ABSTRACT

An electronic circuit device having a power-supply structure capable of supporting fast signals in and above a GHz band is offered. A driver transistor is formed in a surface of a semiconductor substrate. Power-supply/ground pair transmission lines which provide the driver transistor with power and signal/ground pair transmission lines which transmit signals to a receiver are formed on the semiconductor substrate. The power-supply/ground pair transmission lines are connected to a drain layer of the driver transistor and a P^+ layer in a P well. The signal/ground pair transmission lines are connected to a source layer of the driver transistor and a P^+ layer in the P well.